TENTH

ANNUAL REPORT

OF THE

TRUSTEES

OF THE

PHILADELPHIA GAS WORKS.

TO THE

SELECT AND COMMON COUNCILS OF THE
CITY OF PHILADELPHIA.

JANUARY 24, 1845.

PHILADELPHIA:
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REPORT.

To the Select and Common Councils
of the City of Philadelphia:

THE TRUSTEES of the Philadelphia Gas Works, agreeably to the provisions of the several ordinances creating said trust, respectfully present their Tenth Annual Report.

In the department of construction, connected with the manufacture of Gas, a very small expenditure of capital has been made during the past year. The operations on the property on the Schuylkill have been the completion of the southern building, and work-shops, &c. connected therewith, so as to perfect the symmetrical appearance of the Ashton street front; and the erection of a spacious and permanent store-shed occupying the whole extent of the southern wall of the premises, from Ashton street to Beach street. As these additions have in part taken the place of those structures that were injured or destroyed by the storm in the summer of 1843, a proper proportion of their cost has been charged to repairs, and the balance to capital, making an increase to the account of Works of $999 05. The superintendent reports, that all the buildings and apparatus on the property have been kept in a state of thorough repair and efficiency, and may now be considered, for all practical purposes, as good as when first put up.

In the department of distribution and consumption of Gas, the year has been one of unusual activity. In conformity with the arrangements announced in the report made last year, nearly nineteen miles of Street Mains have been laid during the working season, and the result is, that with the exception of a few alleys, and places from which no custom could be reasonably anticipated, every street in the city, east of Broad street, is now furnished with a Gas Main, and nearly all the improved portions of the city, west of Broad street, have in like manner, been supplied. The farther extension of the Mains may now be made at the rate of two or three miles per annum, and such an extension of the distribution will, in all probability, meet the demand that may be made by the public. The customary tables hereto appended, give in detail, these operations, and show the extent of the distribution, and the increase of our customers.

The manufacture of the Gas has been conducted on the same principles that have hitherto been found so economical and perfect. A judicious selection of the best materials, and the skilful combination of them, so as to produce as nearly as practicable, uniformity in the production and quality of the Gas, have continued to yield to our customers, a satisfaction that is not met with elsewhere; and it will be the constant effort of the board, and of their officers, to continue to maintain this high distinction. From the report made by the superintendent, it appears that in the processes of manufacture, there have been used during the past year, 164,742 bushels of coal, estimated at 75 lbs. per bushel, and 2867 barrels of rosin, for distillation; and 169,110 measured bushels of coke for fuel for the retorts. By

the use of these materials, 54,784,000 cubic feet of Gas, and 274,246 bushels of coke have been produced, and the usual additional by-products of coal tar and spent lime. For purification of the Gas, 55,782 bushels of lime have been used, made also on the premises, by calcining 48,000 bushels of shells, and yielding as stated above, the by-product of spent lime for sale, equal to 41,500 heaped bushels.

The greatest quantity of Gas made in one day, was 251,000 cubic feet, on the 20th December, 1844, from 54 retorts; and the greatest consumption in 24 hours was 257,000 cubic feet. This maximum consumption occurred on the 13th of November, and also on the 11th of December, 1844. Although this is a fraction less than the maximum consumption of 1843, it is satisfactorily accounted for by referring to the consumption of Gas in the public street lamps for the latter half of the month of December; these, at that season of the year, now consume about 70,000 cubic feet per night, and as the Christmas holidays occurred during the period of a full moon, the public lighting was then almost entirely suspended. If the quantity consumed by the public lamps, when fully lighted, had been added to the demand for the private lights, we should have had a maximum, on the 24th of December, 1844, of 300,000 cubic feet.

Although we have been able hitherto to keep up the supply for so large a consumption, and might continue to do so for a long time to come, without any additions to the works, could we be assured of a regular daily demand to that extent, yet as the number of the public lamps increases, their periodical irregularity may, if unprovided for, lead in a year or two to some inconve-

nience. To obviate this, the committee on works propose to commence the excavations and make arrangements for the erection of additional gasometers on the southern portion of the lot, between Ashton street and Schuylkill Front street. These enlargements of our store-room will be made so as to occupy about three years in their completion, and from information lately obtained from Europe, it will probably be found economical and expedient to adopt in their construction, a different plan than that upon which the present gasometers have been erected.

The supplies for the manufacturing department are fully exhibited in the following table.

	Bushels.
Stock of Coal on hand, Jan. 1, 1844, -	100,000
Purchased in 1844, - - -	138,663
Gain of measure in carbonizing by weight,	579
	239,242
Coal carbonized in retorts by weight, -	164,742
Stock on hand, Jan. 1, 1845, - -	74,500
	239,242
	Barrels.
Stock of Rosin on hand, Jan. 1, 1844, -	831
Purchased in 1844, - - -	5,452
	6,283
Carbonized or distilled in retorts, -	2,867
Stock on hand, Jan. 1, 1845, - -	3,416
	6,283

	Bushels.
Coke on hand, Jan. 1, 1844, - -	10,000
Made in 1844, - - -	274,246
	284,246
Coke used as fuel for retorts in 1844, -	169,110
Coke used as fuel for offices, - -	500
Coke sold in 1844, - - -	107,636
Stock on hand, Jan. 1, 1845, - -	7,000
	284,246

A majority in number and interest of the holders of the several Gas loans, having duly given their assent to the provisions of the ordinances passed by Councils to enable the Trustees to reduce the price of Gas, the Board proceeded to determine what such reduction should be; to take effect from the first of September, 1844. In order to do this in a safe and proper manner, the whole of the business of the concern was settled up to that date, and after an examination of the results for the eight months ending September 1, 1844, it appeared that a discount of twelve and a half per cent. instead of five per cent., could be made from the bills of our private customers, and leave the amount of profits contemplated by Councils for interest on the Gas loans, for the Sinking Fund of the Gas Works, and for extending and completing the works and distribution as directed by the ordinances just referred to. This estimate having been founded upon the business of that portion of the year when the consumption of Gas is at its minimum, while it has effected a moderate reduction in price, has now been subjected to a comparison with the whole business

of the year 1844, and the Trustees find that they are now enabled to make a still farther reduction, to go into effect from and after the first of February, 1845, from which date the price will be three dollars per thousand cubic feet, with a discount of five per cent. for the prompt payment of the bills at the office within five days after presentation; and as the consumption may from time to time increase, it will be their pleasure, as well as their duty, to make such farther reductions periodically, as the results of the business entrusted to them will justify.

A statement of the receipts and expenditures of the Board for the year 1844, the usual general statement of the affairs of the Gas Works, and an account of the amount of the Sinking Fund and its investments, are herewith submitted. In conclusion, the Trustees congratulate the Councils, and their fellow citizens, on the prosperous condition of the Works under their care, contributing as they do, to the comfort and enjoyment of the people, and, at the same time, aiding the municipal authorities in their police arrangements, to an extent that the inhabitants of cities imperfectly lighted, can scarcely appreciate.

CASH ACCOUNT FOR 1844.

Balance on hand January 1st, 1844, - - -		$20,954 45
Receipts.		
For sales of Gas, Coke, Tar, Lime, &c., and for Service-pipes and Meter-cocks, - - - - -		158,886 84
Interest on City 5 per cent. loans belonging to the Sinking Fund, - - - - - - -		1,930 00
Interest on Bond and Mortgage, - - - -		180 00
		$181,951 29
Payments.		
For Construction of Works on Schuylkill, - -	$ 999 05	
For Distribution of Street Mains, - - - -	49,129 44	
For Service-pipes and Meters, - - - -	11,907 04	
For Salaries of Superintendent, Register, Clerk and assistant Clerk, - - - - - - - - -	4,900 00	
For Coals, Rosin, and other materials used in the manufacture and distribution of Gas, and for repairs and materials of all kinds, wages of workmen, taxes, and all incidental expenses, - - - - - - -	57,190 16	
For Interest on Gas Loans, - - - - - -	28,468 00	
For Stocks purchased for the Sinking Fund of the Gas Works, - - - - - - - - - -	9,708 25	
		$162,301 94
Balance in Bank and in hands of the Superintendent,		19,649 35
		$181,951 29

STATE OF THE WORKS, JANUARY 1, 1845.

Assets.

Works on the Schuylkill, at cost,	$245,088 06
Street Mains for distribution of Gas, at cost,	262,581 94
Service-pipes and Meters, at cost,	85,266 66
Public Lamps, for 300 under original ordinance,	9,751 52
Suspended debt for amount of unpaid bills,	1,957 44
Bond and Mortgage,	3,000 00
Cash,	19,649 35
Coal on hand, 74,500 bushels, at 16½ cents,	12,292 50
Coke on hand, 7,000 bushels, at 5 cents,	350 00
Rosin on hand, 3,416 barrels, at 70 cents,	2,391 20
Due for Gas sold and delivered, and for which bills have not yet been rendered,	28,875 00
Due for Coke, Lime, &c.,	2,500 00
Due for interest on City loan, belonging to Sinking fund,	965 00
Stocks belonging to Sinking fund, at cost,	166,403 50
	$841,072 17

Liabilities.

Six per cent. Loan 1st,	$150,000 00
" " " 2d,	200,000 00
" " " 3d,	125,000 00
Five per cent. Loan 4th,	125,000 00
Due for dividends unpaid,	405 00
Due for interest on loans, including that due Jan. 1, 1845,	14,458 00
Due for coals, rosin, and sundry bills for repairs and materials,	20,000 00
	$634,863 00
Surplus,	206,209 17
	$841,072 17

Of the surplus, $ 181,949 90 belongs to the Sinking fund of the Gas Works, and the balance, after deducting the amount of $ 1,957 44 for

suspended debt, forms part of the contingent fund, as directed by the ordinance of June 17th, 1844, for the enlargement of the Works, extending the distribution, &c.

The investments of the Sinking fund on the 1st of January, 1845, were

$ 33,600 City 5 per cent. Loans, costing $ 36,860 75.

$ 126,400 Gas 5 and 6 per cent. Loans, costing $ 129,042 75.

Leaving a balance of $ 15,546 40 under the care of the Trustees, to be invested in Gas or City Loans.

By order of the Trustees.

THOMAS CAVE, *President.*

Attest—WILLIAM FENNELL, *Register.*

Office of the Philadelphia Gas Works, Jan. 24th, 1845.

DATE.	SER-VICE.	METERS SET.								PUBLIC LAMPS.			
1844.	Pipes.	3 light.	5 light.	10 light.	20 light.	30 light.	45 light.	60 light.	100 light.	On Well.	Watch box.	On post.	Market houses.
To Jan. 1st.	3373	2010	809	410	94	28	13	1	8	49	46	715	27
Jan'y.	29	13	11	4		1						2	
Feb'y.	24	14	4	5		1							
March.	25	16	5	4								22	
April.	41	26	5	8	1	1							
May.	48	25	11	12							1	1	
June.	28	13	9	6						1	2	6	
July.	37	17	11	9							1	8	
Aug.	46	33	11	2								20	
Sept'r.	77	53	13	8	1		1		1				
Oct'r.	81	39	30	10	2					19		12	
Nov'r.	36	25	9	2						13		47	
Dec'r.	31	18	10	2	1					10	1	29	
	503	292	129	72	5	3	1		1	43	5	147	
Bt.down	3373	2010	809	410	94	28	13	1	8	49	46	715	27
Total.	3876	2302	938	482	99	31	14	1	9	92	51	862	27

DATE.	MAIN PIPES LAID IN STREETS, LINEAL FEET.								
1844.	2 inch.	3 inch.	4 inch.	6 inch.	8 inch.	10 inch.	12 inch.	16 inch.	Total length.
To Jan. 1st.	9348	106483	68855	26500	5553	9167	10881	2340	239127
Jan'y.			181						181
Feb'y.									
March.		1638	936						2574
April.		6300	6228	18					12546
May.	6906	4149	4753	72					15880
June.	1194	6291	2880		1080				11445
July.		3663	2574	765	1197				8199
Aug.	6696	5706	2178	18					14598
Sept'r.	8028	4527	774	1485					14814
Oct'r.	3396	1287	1782		513	891			7869
Nov'r.	4338	4167	324						8829
Dec'r.	138	927	945		873				2883
	30696	38655	23555	2358	3663	891			99818
Bt.down	9348	106483	68855	26500	5553	9167	10881	2340	239127
Total,	40044	145138	92410	28858	9216	10058	10881	2340	338945 ft.*

* Or $64\frac{1}{5}$ miles.

DATE.	APPLI-CATION.	DISCON-TINUED.	PRIVATE LIGHTS.		PUBLIC LIGHTS.		PUBLIC SQUARES.
1844.			Added.	Total.	Streets.	M. H.	
To Jan. 1st.	6086	2657		30658	810	27	62
Jan'y.	90	60	414	31072	2		
Feb'y.	54	31	302	31374			
March.	68	43	350	31724	22		
April.	92	51	197	31921			
May.	73	34	301	32222	2		
June.	56	28	244	32466	9		
July.	73	36	273	32739	9		
Aug.	81	35	347	33086	20		
Sept'r.	127	44	555	33641			
Oct'r.	143	65	857	34498	31		
Nov'r.	72	34	608	35106	60		
Dec'r.	71	42	492	35598	40		
Total for 1844.	1000	503	4940		195		
Bt down	6086	2657			810		
Total,	7086	3160			1005	27	62